

Amendments to the Specification

Please insert the following paragraph below the title on page 1:

This application is a continuation application of my co-pending United States Patent Application 10/178,345 filed June 25, 2002, which application is hereby incorporated by reference herein.

Please replace the paragraph beginning at line 34 on page 11 with the following amended paragraph:

In the horizontal position (that is, zero ascent or zero descent), a leading portion of outer envelope 22 is designated generally as 70. During forward level flight the stagnation point $P_{\text{Stagnation}}$ will lie in this forward, or leading region, typically more or less at the leading extremity. A trailing region 72 lies on the opposite extremity of outer envelope 22, and faces rearward during forward flight. In the preferred embodiment, a boundary layer separation suppression apparatus in the nature of an air pump, such as third propeller 74, is mounted on a fixed pylon 76 standing outwardly aft of trailing region 72. Propeller 74 is a pusher propeller connected to a variable speed electric motor 78, and works as an air pump to urge air to flow away from trailing region 72 and to be driven rearwardly. This may tend to create a region of relatively low pressure aft of trailing region 72 and may tend to cause the point of separation of the flow about outer envelope 22 to be located closer to trailing region 72 than might otherwise be the case, with a consequent reduction in drag and improvement in forward conduct of airship 20. In the preferred embodiment in which outer envelope 22 is about 250 ft in diameter, propeller 74 is about 40 ft in diameter, and turns at a rate of between zero and 250 rpm. A boundary layer separation suppression element 75, namely roughening 77, is mounted to leading region 70.